Australian/New Zealand Standard™

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V

Part 5: Flexible cables (cords)

STANDARDS Australia

STANDARDS NEW ZEALAND
PAEREWA AOTEAROA

AS/NZS IEC 60227.5:2019

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee EL-003, Electric Wires And Cables. It was approved on behalf of the Council of Standards Australia on 4 November 2019 and by the New Zealand Standards Approval Board on 4 December 2019.

This Standard was published on 20 December 2019.

The following are represented on Committee EL-003:

Australian Cablemakers Association
Australian Industry Group
Electrical Compliance Testing Association of Australia
Engineers Australia
Institute of Electrical Inspectors (Australia)
Master Electricians (New Zealand)
National Electrical and Communications Association (Australia)
Queensland University of Technology
WorkSafe New Zealand

This Standard was issued in draft form for comment as DR AS/NZS IEC 60227.5:2019.

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ISBN 978 1 76072 673 7

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Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V

Part 5: Flexible cables (cords)

Originated as AS/NZS 60227.5:2003.
Revised and redesignated as AS/NZS IEC 60227.5:2019.

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables, to supersede AS/NZS 60227.5:2003, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V, Part 5: Flexible cables (cords)*.

The objective of this Standard is to provide details for the particular specifications for polyvinyl chloride insulated flexible cables (cords), of rated voltages up to and including 300/500 V.

All cables conform with the appropriate requirements given in IEC 60227-1 and each individual type of cable conforms with the particular requirements of this part.

This Standard is identical with, and has been reproduced from, IEC 60227-5:2011, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V — Part 5: Flexible cables (cords)*.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this part of IEC 60227" should read "this Australian/New Zealand Standard".

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The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

POLYVINYL CHLORIDE INSULATED CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V –

Part 5: Flexible cables (cords)

FOREWORD

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International Standard IEC 60227-5 has been prepared by IEC technical committee 20: Electric cables.

This third edition of IEC 60227-5 cancels and replaces the second edition published in 1997, Amendment 1 (1997) and Amendment 2 (2003). The document 20/1263/FDIS, circulated to the National Committees as Amendment 3, led to the publication of this new edition.

The main change with respect to the previous edition is as follows:

– Inclusion of a test for long term resistance of insulation to d.c in 4.4.

The text of this standard is based on the following documents:

FDIS	Report on voting
20/1263/FDIS	20/1273/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 60227 series, published under the general title *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

POLYVINYL CHLORIDE INSULATED CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V –

Part 5: Flexible cables (cords)

1 General

1.1 Scope

This part of IEC 60227 details the particular specifications for polyvinyl chloride insulated flexible cables (cords), of rated voltages up to and including 300/500 V.

All cables comply with the appropriate requirements given in IEC 60227-1 and each individual type of cable complies with the particular requirements of this part.

1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE The IEC 60811 series is currently undergoing a revision, which will lead to a restructuring of its parts. A description of this, as well as a cross-reference table between the current and planned parts will be given in IEC 60811-100.

IEC 60227-1:2007, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

IEC 60227-2:1997*, Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 2: Test methods*
Amendment 1 (2003)

IEC 60228*, Conductors of insulated cables*

IEC 60332-1-2, *Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame*

IEC 60811-1-1:1993*, Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section 1: Measurement of thickness and overall dimensions – Tests for determining the mechanical properties*
Amendment 1 (2001)

IEC 60811-1-2:1985*, Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Two: Thermal ageing methods*
Amendment 1 (1989)
Amendment 2 (2000)

IEC 60811-1-4:1985*, Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Four: Tests at low temperature*
Amendment 1 (1993)
Amendment 2 (2001)